MIS11 calcareous nannoplankton assemblages off western Iberia (MD01-2443): Paleoecological and paleoceanographic implications

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Orbital parameters and greenhouse gas concentrations during Marine Isotope Stage (MIS) 11 (428 - 360 ka) are most similar to the Holocene, and thus MIS11 is considered a past analogue of the present day interglacial climatic system. For this study, a high-resolution set of 216 samples for a 61 kyr time-interval from the MIS 11 section of the core MD01 – 2443 (western Iberian margin; de Abreu *et al*., 2005) was analysed.

The main kenotic affinity associations of calcareous nannoplankton were identified and characterized by establishing possible linear correlations between certain coccolithophores and paleoecological and/or paleoclimatic proxies. Thus, possible paleoenvironmental and paleoproductivity forcing mechanisms are addressed by statistically matching our time-series against other micropaleontological (benthic and planktonic foraminifera) and geochemical ($\delta^{18}O$) proxies from de Abreu *et al*. (2005). Results will be presented and discussed, namely the possible existence of sub-Milankovitch cycles through the identification of meaningful frequencies for each taxon.

Reference

de Abreu, L., Abrantes, F., Shackleton, N.J., Tzedakis, P., McManus, J., Oppo, D. & Hall, M. 2005. Ocean climate variability in the eastern North Atlantic during interglacial marine isotope stage 11: A partial analogue to the Holocene. *Paleoceanography*, **20**: 1-15.